

Heavy rains over the upper Roanoke, upper Cape Fear, and upper Pee Dee drainage basins occurred on October 3 and 4 caused decided rises, which were covered by warnings for the streams mentioned. The overflow was not serious and there was little or no damage.

Mississippi drainage.—The rains of the last days of September and early October brought about moderate floods in the Illinois River of Illinois and the Grand and Osage Rivers of Missouri. The floods were moderate and well covered by warnings. Losses and damage were small since no crops had been planted in the newly overflowed areas after the destructive spring and early summer floods.

The same general and heavy rainstorms above mentioned also covered southern Kansas, eastern Oklahoma and Arkansas, and quite severe floods followed in the lower Neosho and lower Verdigris Rivers of Kansas and Oklahoma. Stages were also well above the flood line in the Arkansas River from Webbers Falls, Okla., almost to Little Rock, Ark., and in the White River of Arkansas, except the extreme upper and extreme lower portions, and a local flood was reported at Oklahoma City, Okla.

The highest stages, both relative and absolute, occurred in the Verdigris River above Catoosa, Okla., below which place the crest was greatly depressed. At Independence, Kans., the Verdigris River reached a stage of 45.95 feet on October 3, 15.95 feet above the flood stage and within 0.7 foot of the record stage of July 8, 1904.

The lower Neosho River flood was almost equal to the flood of April, 1927, although not nearly so destructive as the Verdigris flood, while the North Canadian River flood at Oklahoma City, Okla., was confined to that vicinity without material damage resulting. Only low bottom lands from the city eastward were flooded. The Arkansas and White River floods were more moderate, and the total of losses reported was not great.

Timely warnings were issued for all these floods, and reported savings through them were \$25,000 along the Neosho River, \$150,000 along the Verdigris River, and \$15,000 along the White River. Incomplete data as to loss and damage are as follows:

River basin	Miscellaneous	Crops		Livestock and other movable property	Suspension of business	Total
		Matured	Prospective			
Neosho.....	\$25,000	\$15,000	\$35,000	\$20,000	\$5,000	\$100,000
Osage in Kansas.....	25,000					25,000
Verdigris.....	1,270,000			75,000		1,345,000
White.....	97,000					97,000
Total.....	1,417,000	15,000	35,000	95,000	5,000	1,567,000

About 15,000 acres of crop lands were overflowed in the Neosho Basin. Highways in Labette and southern Neosho Counties of Kansas were impassable for several days, and railroad traffic along low places interrupted. In the Verdigris Basin about 90,000 acres of land were overflowed, 65,000 acres of which are in Kansas, mainly in Montgomery County which was the principal sufferer. Along the Arkansas River the only losses reported were those of a small quantity of crops in the lower bottoms.

A moderate flood in the Trinity River of Texas from Dallas to a short distance below Trinidad was caused by very heavy rains on October 1, the 24-hour amounts ranging from 2 to a little more than 3 inches. Warnings were issued promptly and as result, there was no damage of consequence, while property valued at \$6,500 was saved.

A decided rise in the lower Rio Grande, apparently coming from the San Juan River of Mexico was well forecast, and about \$10,000 saved thereby to the people of the valley. Levees were strengthened, some excess water diverted through a flood-control outlet, and other precautionary measures taken.

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
<i>Atlantic drainage</i>					
Lackawaxen, Hawley, Pa.....	<i>Feet</i> 9	19	19	<i>Feet</i> 10.1	19
Susquehanna:					
Oneonta, N. Y.....	12	20	20	12.5	20
Bainbridge, N. Y.....	11	20	21	12.0	21
Binghampton, N. Y.....	14	19	20	16.6	19
Towanda, Pa.....	16	20	20	17.3	20
Wilkes-Barre, Pa.....	20	20	21	25.6	21
Roanoke, Weldon, N. C.....	30	6	6	33.6	6
<i>Mississippi drainage</i>					
Stony Creek, Johnstown, Pa.....	10	20	20	12.0	20
Tippecanoe, Norway, Ind.....	6	2 31	2 31	6.5 6.0	2 31
Illinois:					
Peru, Ill.....	14	3	21	14.9	4-5
Havana, Ill.....	14	7	22	15.3	15
Beardstown, Ill.....	14	6	26	17.0	12-14
Pearl, Ill.....	12	9	21	13.9	13-15
Grand:					
Gallatin, Mo.....	20	7	7	21.0	7
Chillicothe, Mo.....	18	3	3	18.7	3
Osage:					
Osceola, Mo.....	20	2	12	26.1	9
Warsaw, Mo.....	22	2	12	28.2	9
Tuscumbia, Mo.....	25	4	13	27.7	11
Arkansas:					
Webbers Falls, Okla.....	23	3	5	24.8	4
Fort Smith, Ark.....	22	4	6	24.7	4-5
Ozark, Ark.....	22	5	5	22.4	5
Dardanelle, Ark.....	20	4	7	23.2	6
Morrilton, Ark.....	20	5	8	22.0	6
Neosho:					
Le Roy, Kans.....	24	2	2	26.0	2
Iola, Kans.....	15	2	3	19.8	2
Oswego, Kans.....	17	3	8	24.0	7
Fort Gibson, Okla.....	22	3	5	24.8	4
Verdigris, Independence, Kans.....	30	2	5	46.0	3
North Canadian, Oklahoma City, Okla.....	12	1	1	13.1	1
Pettit Jean, Danville, Ark.....	20	3	5	21.7	4
White:					
Calico Rock, Ark.....	18	2	6	30.5	3
Batesville, Ark.....	23	3	7	32.8	4
Newport, Ark.....	26	5	8	28.0	7
Georgetown, Ark.....	22	10	10	22.0	10
Black:					
Black Rock, Ark.....	14	1	1	15.0	1
Corning, Ark.....	11	2	5	11.9	4
<i>West Gulf drainage</i>					
Trinity:					
Dallas, Tex.....	25	3	4	29.7	3
Trinidad, Tex.....	28	4	19	35.3	3
Little, Little River, Tex.....	30	2	3	43.3	2
Nueces, Cotulla, Tex.....	15	11	12	16.0	12

MEAN LAKE LEVELS DURING OCTOBER, 1927

By UNITED STATES LAKE SURVEY

[Detroit, Mich., November 3, 1927]

The following data are reported in the "Notice to Mariners" of the above date:

Data	Lakes ¹			
	Superior	Michigan and Huron	Erie	Ontario
Mean level during October, 1927:				
Above mean sea level at New York.....	Feet 602.73	Feet 579.10	Feet 571.32	Feet 244.99
Above or below—				
Mean stage of September, 1927.....	+0.03	—0.06	—0.36	—0.28
Mean stage of October, 1926.....	+1.10	+0.76	—0.39	+0.06
Average stage for October, last 10 years.....	+0.55	—0.74	—0.54	—0.45
Highest recorded October stage.....	—0.91	—3.94	—2.38	—2.82
Lowest recorded October stage.....	+1.34	+1.19	+0.72	+1.32
Average departure (since 1860) of the October level from the September level.....	—0.05	—0.23	—0.32	—0.34

¹ Lake St. Clair's level: In October, 1927, 574.12 feet.